

**Unless stated otherwise, leave answers in exact form.**

1. Find the area of a regular hexagon with side length 12.
2. Find the area of a regular triangle with apothem 18.
3. Find the area of an equilateral triangle with apothem of 3.
4. The length and width of a rectangle are in a ratio of 2:3. The area is 125. Find the length and width.
5. An isosceles trapezoid has bases 12 and 28. The area is 300. Find the perimeter of the trapezoid.
6. The area of a kite is 400 sq cm. Find the length of the diagonals if one is twice as long as the other.
7. Find the area of a rhombus with one diagonal 8 and side 5.

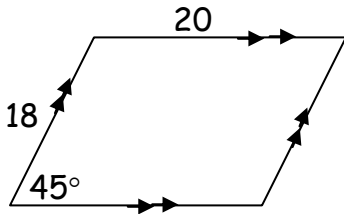
8. The hypotenuse of a 30-60-90 triangle is 10.8 ft. Find the perimeter of the triangle to the nearest tenth.

9. The area of a rectangle is 180. The height is twice the base. Find the perimeter.

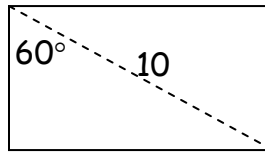
10. The area of a square is 225 sq. ft. Find the area of a rectangle with the same perimeter whose base is 6 ft.

11. The diagonal of a square is 33 cm. Find the area of the square.

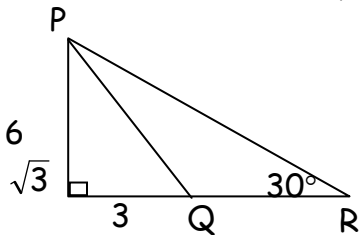
12. Find the area.



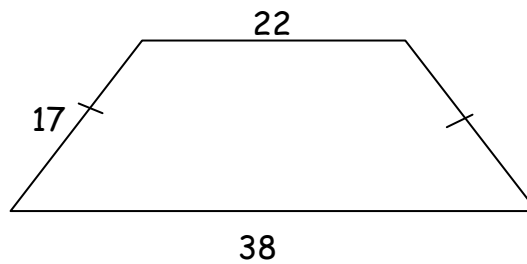
13. Find the area of the rectangle.



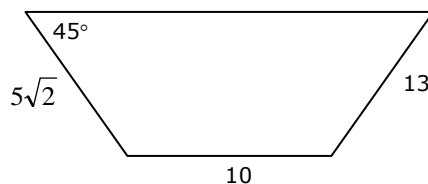
14. Find the area of  $\triangle PQR$ .



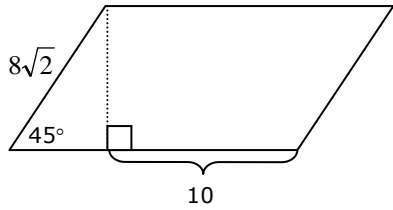
15. Find the area of the trapezoid.



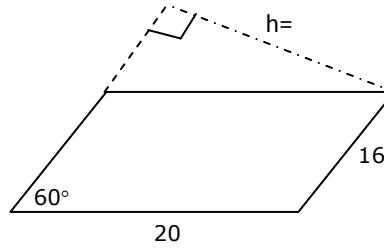
16. Find the area of the trapezoid.



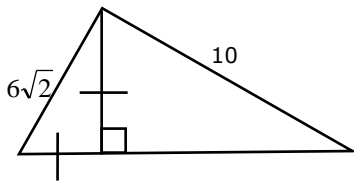
17. Find the area of the parallelogram.



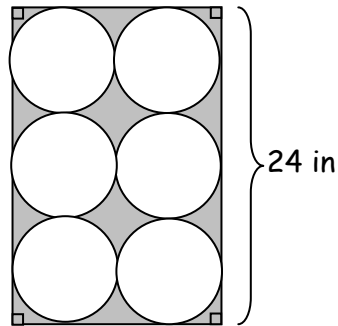
18. Find the area of the parallelogram. Then find the missing height.



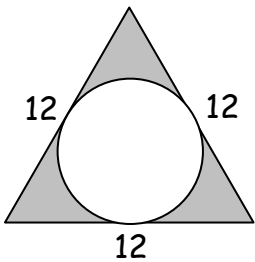
19. The area of the triangle.



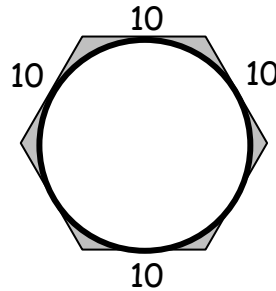
20. Find the area of the shaded region.



21. Find the area of the shaded region.



22. Find the area of the shaded region. (outer shape is a regular hexagon)



23. Find the area of the shaded region. (both are regular hexagons)

